

## OUTLOOK FOR THE PRODUCTION OF SOUTHERN FIELD PEAS FOR FREEZING

JAMES MONTELARO

*Minute Maid Corporation*

Plymouth

Southern pea production in Florida for the fresh market and processing is still of minor importance. For 1954-'55 season, it was estimated by the Florida State Marketing Bureau (1) that approximately 16,000 acres of Southern peas were harvested. At an estimated average yield of thirty-five bushels this acreage produced 525,000 bushels of peas. Averaging about \$1.75 per bushel, the total value of this crop to the grower was estimated at \$893,000. A small portion of this crop goes to the processor, but the majority moves into fresh-market channels.

It would not be reasonable to forecast large increases in the demand for this crop for freezing in the near future. Even though the Southern pea is quite popular in the South as a table vegetable, this is not generally true throughout the United States. The frozen pack increased ten-fold from 1948-1954 in the United States, but the total of 5,697,000 pounds packed in 1954 is relatively small when compared with the major frozen items like green peas, lima beans, snap beans, corn, broccoli, etc. (2).

It is hoped that Southern peas will follow the path of broccoli to popularity. Within a relatively few, short years, broccoli has moved from popularity among localized groups of foreign birth to a place of prominence among the more important vegetables. Nutrition-minded people are bound to discover the Southern pea and eventually give it its rightful place in a balanced diet. A recent survey conducted by the Wisconsin Alumni Research Foundation (4) on the nutrients in frozen foods showed that the blackeye pea is an excellent source of vitamins and minerals—actually topping the list in several categories.

One of the greatest stumbling blocks to more rapid acceptance of Southern peas has been the lack of a good name for labelling.

The various types of Southern peas have been bandied about in the trade under such unappetizing names as field peas, cowpeas, etc. Acceptance and popularity of the recently coined name of "Southern peas" remains to be seen.

Should the name "Southern peas" become generally accepted by the trade, only half of the battle will have been won for there is the problem of dealing with the various types of Southern peas. At the present time there are crowders, creams, and blackeyes available in cans and at least two of these in the frozen package. By far, the most commonly accepted label name in the freezing industry is the "blackeye pea." To a large extent that name precludes the packaging of other types of Southern peas under that label. The cream and crowder peas must appear under different label names.

The development of a sizeable Southern pea production in Florida for the freezing industry hinges on a number of factors even after those dealing with consumer demand and labelling have been resolved. Historically the freezing industry has followed in the footsteps of the canning industry in search of a source of supply. Other Southern states like Georgia and Texas have planted sizeable acreages of Southern peas for canning in past years and are now producing for the freezer. Not having that background, Florida is in the position of having to develop this industry against established competition.

The plant breeder must necessarily play one of the leading roles in the development of this crop. The varieties that are available now are not completely satisfactory from the standpoint of production. Since, for the present time, the frozen pack seems to be more or less tied to the blackeye type, new varietal developments for freezing must possess a semblance of the blackeye characteristic of present varieties.

Southern peas as a table legume must compete pricewise with the other table legumes for the consumer's dollar. A leading frozen foods magazine (3) publishes a list of retail

price quotations as advertised in the newspapers for the various brands in a number of leading markets. Prices quoted in their last August issue were generally as high or higher for blackeye peas than those quoted for English peas, lima beans, and snap beans. If the grower is to produce Southern peas to retail competitively and at a price which would guarantee fair profits to all involved, the unit cost of production must be reduced. The logical approach is to eliminate the excessive cost of harvesting by hand. This is indeed a big order, but it is not impossible. The plant breeder has succeeded with other crops in developing strains with a concentrated set for machine harvest. Farm equipment engineers have developed practical machinery for harvesting English peas and lima beans and working models for bush snap beans. Surely a crop like Southern peas with characteristic fruit-set high up on the plant will be adapted to machine harvest if a variety can be developed with a concentrated set.

Progress is being made in the quest for better control of insects, diseases, and nema-

todes. Problems in handling, storage and processing have received considerable attention by Station workers. Florida is blessed with abundant land for expanding production of a crop like Southern peas. The cooperative efforts of freezers, growers, and research workers are needed to solve the problems in this development and to insure its success. Florida has the potential to develop a sizeable addition to the vegetable industry, but it will require time, cooperation, work and patience on the part of the people involved.

#### LITERATURE CITED

1. Anonymous. Annual Fruit and Vegetable Report, 1954-'55 Season, Florida State Marketing Bureau, p. 51. November 1955.
2. Anonymous. Frozen Food Factbook and Directory (1956). National Frozen Food Distributors Association, p. 57.
3. Anonymous. Retail Prices by Products, Brands and Markets. Quick Frozen Foods 25 (1): 67-69. August, 1956.
4. Burger, Maril, Hein, L. W., Teply, L. J., Derse, P. H. and Kreiger, C. H. Vitamins, Minerals and Proximate Composition of Frozen Fruits, Juices, and Vegetables. Agricultural and Food Chemistry, 4 (5): 418-426. May, 1956.

## INSECT PROBLEMS IN THE PRODUCTION OF SOUTHERN PEAS (COWPEAS)

JOHN W. WILSON

Central Florida Experiment Station

Sanford

W. G. GENUNG

Everglades Experiment Station

Belle Glade

Southern peas (cowpeas) like most other crops are subject to the attack of several insect pests. Before the advent of hydrocarbon insecticides, we did not have economically effective insecticides for such pests as the cowpea curculio, *Chalcodermus aeneus* Boh., and the bean leaf hopper, *Empoasca fabae* (Harr). In fact the inability to control such injurious insects as the cowpea curculio was one of the factors that limited the commercial development of Southern peas as a widely used vege-

table. Recent improvement in the table quality and ease of harvesting this vegetable, coupled with the effective use of hydrocarbon insecticides, has tremendously increased the potential market for Southern peas. Of course, there are other factors such as the development of the quick freeze process that have contributed to the increased demand for Southern peas for table use.

Dupree and Beckham (1) in a recent Georgia Experiment Station bulletin state that the Southern pea is one of the leading crops processed in Georgia and that this crop would be more important except for damage by the cowpea curculio. This latter statement is equally true in Florida. However, the ravages of the cowpea curculio should no longer operate as a deterrent to Southern pea production because it can now be readily controlled.

The adult cowpea curculio is a small black weevil about 3/16 of an inch long with an almost straight beak about 1/2 the length of the